

REMARKS

Reconsideration and allowance in view of the forgoing amendment and the following remarks are respectfully requested.

In the non-final Office Action of March 1, 2004, the Examiner rejects claims 1-4, 7 and 8 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,414,405 to Schesser et al. ("Schesser") and rejects claims 5, 6 and 9-13 as allegedly being unpatentable over Schesser in view of U.S. Patent No. 5,903,370 to Johnson. Applicants traverse the rejections.

By this amendment, claims 1-19 are pending. Claims 1, 4, 6, 7 and 9-13 are amended to improve form and claims 14-19 are added.

103 Rejection of Claims 1-4, 7 and 8 (Schesser)

Claim 1 recites a system for communicating between a first region having a first site and a second site, and a second region having a third site and a fourth site. The system comprises, among other things, a first cable having two ends, a second cable having two ends and a third cable having four ends. The first cable has a first end terminating at the first site and a second end terminating at the third site. The second cable has a first end terminating at the second site and a second end terminating at the fourth site. The third cable has a first end terminating at the first site, a second end terminating at the third site, a third end terminating at the second site and a fourth end terminating at the fourth site. The first cable and the second cable each have a capacity of bandwidth X and the third cable has a capacity of at least bandwidth 2X.

On page 2 of the outstanding Office Action, the Examiner states that Schesser discloses a three-cable system to provide reliability in case one cable is broken. The Examiner cites Schesser, at column 1, lines 21-38 as support for the statement.

Schesser, at column 1, lines 33-35, states that, "[c]onventional branching units typically manage the cabled-fiber interconnections and the power conductor paths among three cables." Figs 1A and 1B of Schesser show a prior art branching unit having one cable or trunk and two cable legs (branches 1 and 2). Schesser is completely silent regarding a first cable having two ends, where the first end terminates at a first site and the second end terminates at a third site, as recited in claim 1. Schesser is completely silent regarding a second cable having two ends, where the first end terminates at a second site and the second end terminates at a fourth site, as recited in claim 1. Further, Schesser is completely silent regarding the first cable and the second

cable each having a capacity of bandwidth X and a third cable having a capacity of at least bandwidth 2X, as recited in claim 1.

The Examiner appears to be stating that because three cables may be connected to a branching unit (a trunk and two cable legs) and because Schesser discloses a cable that has four ends connected to sites A and B in one region and sites B and D in another region, it would be obvious to one of ordinary skill in the art to build the system of claim 1, even though the first cable, as recited in claim 1, the second cable, as recited in claim 1, and the bandwidths of the three cables, as recited in claim 1 are neither disclosed nor suggested by Schesser. Further, by the Examiner's statements, at the top of page 3 of the Office Action, the Examiner appears to be under the impression that reference numerals 1, 2, 7 and 8 of cable 15 of Fig. 2 of Schesser refer to individual cables. Applicants submit that 1, 2, 7 and 8 of Fig. 2 of Schesser are fibers, not cables. See Schesser at column, 4, lines 61-64 and column 5, line 28.

In addition, Applicants submit that Schesser teaches away from adding additional cables. For example, Schesser at column 4, lines 26-30 states that Fig. 2 requires only a single transoceanic cable in contrast to traditional dual cable systems necessary to provide similar reliability and availability. Schesser further states that eliminating a single transoceanic cable can have significant cost reduction on installation costs of such a system (Schesser at column 4, lines 30-32). Therefore, Applicants submit that one of ordinary skill in the art would not be motivated to add additional cables to the system of Schesser.

For at least the reasons discussed above, Applicants submit that claim 1 is patentable over Schesser and respectfully request that the rejection of claim 1 be withdrawn.

Claims 2-4 depend from claim 1 and are patentable over Schesser for at least the reasons discussed above with respect to claim 1. Therefore, Applicants respectfully request that the rejection of claims 2-4 be withdrawn.

Claim 7 recites features similar to those of claim 1. Applicants submit that claim 7 is patentable over Schesser for reasons similar to those discussed above with respect to claim 1. Therefore, Applicants respectfully request that the rejection of claim 7 be withdrawn.

Claim 8 depends from claim 7 and is patentable over Schesser for at least the reasons discussed above with respect to claim 7. Therefore, Applicants respectfully request that the rejection of claim 8 be withdrawn.

103 Rejection of Claims 5, 6 and 9-13 (Schesser, Johnson)

Claims 5 and 6 depend from claim 1, which, as discussed above, recites features not disclosed or suggested by Schesser. Johnson also fails to disclose or suggest the features of claim 1.

Johnson relates to a system and method for restoring communication in an optical domain of a communication network (Johnson at column 1, lines 6-9). Johnson does not disclose or suggest the first, second and third cables, as recited in claim 1. Further, the combination of Schesser and Johnson does not disclose or suggest the first, second and third cables, as recited in claim 1. Therefore, Applicants submit that claims 5 and 6 are patentable over Schesser and Johnson for at least the reasons claim 1 is allowable. Therefore, Applicants respectfully request that the rejection of claims 5 and 6 be withdrawn.

Claim 9 recites a system for communicating data classified into grades between a first region having a first and a second site, and a second region having a third and a fourth site. The system comprises, among other things, a first cable, a second cable and a third cable. The first and the second cables have bandwidth X. The first cable is connected to one of a first data port or a second data port of a first one of a group of switching elements and one of a first data port or a second data port of a third one of the switching elements. The second cable is connected to one of a first data port or a second data port of a second one of the switching elements and one of a first data port or a second data port of a fourth one of the switching elements. The third cable has at least a bandwidth of 2X and is connected to one of the first or the second data ports of each switching element. Each cable is distantly routed from each other cable.

On page 4 of the Office Action, the Examiner asserts that Schesser teaches a three-cable system to provide reliability in case one cable is broken. As discussed above with respect to claim 1, Schesser, at column 1, lines 33-35, states that, “[c]onventional branching units typically manage the cabled-fiber interconnections and the power conductor paths among three cables.” Figs 1A and 1B of Schesser show a prior art branching unit having one cable or trunk and two cable legs (branches 1 and 2). Schesser is completely silent regarding a first cable and a second cable, each having a bandwidth of X and connected to data ports of switching elements as recited in claim 9. Further, Schesser is completely silent regarding a third cable having at least a bandwidth of 2X and connected to data ports of switching elements as recited in claim 9. Also, as discussed above with respect to claim 1, Schesser teaches away from adding additional cables.

Johnson fails to satisfy the deficiencies of Schesser. Applicants submit that neither Schesser nor Johnson disclose or suggest, separately or in combination, the above-mentioned features of claim 9. Therefore, Applicants respectfully request that the rejection of claim 9 be withdrawn.

Claim 10 depends from claim 9 and is patentable over Schesser in view of Johnson for at least the reasons discussed above with respect to claim 9. Therefore, Applicants respectfully request that the rejection of claim 10 be withdrawn.

Claim 11 recites a system for communicating data classified into grades between a first region having a first and a second site, and a second region having a third and a fourth site. The system comprises, among other things, a first cable, a second cable and a third cable. The first cable of bandwidth X connects the first site and the third site. The second cable of bandwidth X connects the second site and the fourth site. The third cable of at least bandwidth 2X connects each of the sites. Applicants submit that the above features of claim 11 are similar to the previously discussed features of claim 9. Applicants further submit that claim 11 is patentable over Schesser in view of Johnson for reasons similar to the reasons discussed above with respect to claim 9. Therefore, Applicants respectfully request that the rejection of claim 11 be withdrawn.

Claim 12 recites a method of switching grades of data in a communications network when at least one data cable failure occurs in the network. The communications network has a first cable of bandwidth X connected to one of a first data port or a second data port of a first one of a group of switching elements and one of a first data port or a second data port of a third one of the switching elements, a second cable of bandwidth X connected to one of a first data port or a second data port of a second one of the switching elements and one of a first data port or a second data port of a fourth one of the switching elements, and a third cable of at least bandwidth 2X connected to one of the first or the second data ports of the first one of the switching elements and the second one of the switching elements and one of the first or the second data ports of the third one of the switching elements and the fourth one of the switching elements. Applicants submit that the above features of claim 12 are similar to the previously discussed features of claims 9 and 11. Applicants further submit that claim 12 is patentable over Schesser in view of Johnson for reasons similar to the reasons discussed above with respect to claims 9 and 11. Therefore, Applicants respectfully request that the rejection of claim 12 be withdrawn.

Claim 13 recites features similar to those of claims 9, 11 and 12 and is patentable over Schesser in view of Johnson for at least the reasons discussed above with respect to claims 9, 11 and 12. Therefore, Applicants respectfully request that the rejection of claim 13 be withdrawn.

New claims 14-19

New claims 14-19 depend from claims 1, 7, 9, 11, 12 and 13, respectively, and are patentable, at least for the reasons discussed above with respect to claims 1, 7, 9, 11, 12 and 13.

Conclusion

All rejections have been addressed. Applicants submit that the application is now in condition for allowance and a notice to that effect is earnestly solicited.

To the extent necessary, a petition for an extension of time under 37 CFR 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 13-2491 and please credit any excess fees to such deposit account.

Respectfully submitted,

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